

DOCUMENT RESUME

ED 045 130

52,

LI 002 280

AUTHOR Walters, J. Hart, Jr.
 TITLE Image and Status of the Library and Information Services Field. Final Report.
 INSTITUTION Office of Education (DHEW), Washington, D.C. Bureau of Research.
 SPONS AGENCY National Library of Medicine (DHEW), Bethesda, Md.; National Science Foundation, Washington, D.C.; Office of Education (DHEW), Washington, D.C. Bureau of Research.
 BUREAU NO ER-7-1084
 PUB DATE Jul 70
 CONTRACT OEC-1-7-071084-5017
 NOTE 89p.
 EDRS PRICE MF-\$0.50 HC-\$4.95
 DESCRIPTORS Information Science, *Librarians, Library Education, *Manpower Needs, *Professional Personnel, *Professional Recognition, Questionnaires, *Status, Surveys
 IDENTIFIERS Information Scientists

ABSTRACT

The objective of this study on the image and status of the library and information services field was to learn something about the attractiveness of an occupation and to determine, for example, how prestigious the library and information services profession is in comparison with other occupations. The status of different types of job within the field as perceived by employed professionals and students in training for professional work was also investigated. The methodology of the study is described in detail in the appendix. In general, the study showed a relatively close set of correspondence of attitudes of employed professionals and library students, but some decided dissonance between the aforementioned respondents and non-library students. Such evidence broadly suggests that the field will need to take positive steps to change its image if it hopes to attract the kinds of people who, thus far, have chosen other professions. (Author/NH)

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FINAL REPORT
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IMAGE AND STATUS OF THE LIBRARY
AND INFORMATION SERVICES FIELD

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July 1970

Part of
A Program of Research into the Identification
of Manpower Requirements, the Educational
Preparation and the Utilization of Manpower
in the Library and Information Profession

Funded by the
National Library of Medicine
National Science Foundation
U. S. Office of Education

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

IT 002283

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The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contributors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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The study reported here was conducted as part of the Maryland Manpower Research Program. While this effort by Dr. Walters is concerned mainly with such specific issues as the status of the library profession in relation to other professions, occupational values in the profession, and the attractiveness of library and information service work, the other studies being conducted treat other factors. The overall project design was conceived to embrace some of the key organizational and behavioral factors relating to manpower needs, utilization, and education in library and information services.

The other studies which make up the Maryland Manpower Research Program are being issued as part of this same technical report series. They include the following:

August C. Bolino. SUPPLY AND DEMAND ANALYSIS OF MANPOWER TRENDS IN THE LIBRARY AND INFORMATION FIELD

Edwin E. Olson, INTERLIBRARY COOPERATION

Mary Lee Bundy and Paul Wasserman, LEADERSHIP FOR CHANGE: The Academic Library Administrator and His Situation; The Public Library Administrator and His Situation; The School Library Supervisor and Her Situation; the Special Library and Information Center Specialist and His Situation.

Robert Presthus. TECHNOLOGICAL CHANGE AND OCCUPATIONAL RESPONSE: A STUDY OF LIBRARIANS

Stanley J. Segal. PERSONALITY AND ABILITY PATTERNS OF LIBRARY AND INFORMATION SERVICE WORKERS

Rodney F. White, EDUCATION, CAREERS AND PROFESSIONALIZATION IN LIBRARY AND INFORMATION SCIENCE

Paul Wasserman
Mary Lee Bundy
Project Directors

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PREFACE

This study had its genesis in the idea that the ability of an occupation to attract and retain people--or to repel them--is in part a function of its status and the "image" or picture that it represents. The concept is of particular value in a setting in which forces of change and innovation are juxtaposed with attitudes and practices that are thought to be traditional.

Presumably, if the picture of the profession was still being viewed in traditional terms, that same picture could act as a force to deter precisely those kinds of people who could be agents of change. Moreover, if we assume that the profession and its practices are in fact undergoing change, and where some degree of innovation is at least a partial reality, the gap between that reality of change and an image of static immobility could indeed deter entry on the part of those potential candidates who could respond to and help accelerate such change.

This study was thus designed to learn something about the image and status of the library and information services occupation as perceived, firstly, by employed professionals in the field, and secondly, by those who had chosen the field and were in advanced education for it. The study also looked at other groups of students: those who had chosen other professional fields and who were in graduate training and those who might constitute a potential source of manpower--undergraduate students in the liberal arts and sciences curricula.

The author acknowledges the critical guidance of the Project Directors, Dr. Paul Wasserman and Dr. Mary Lee Bundy, of the University of Maryland, in both the initial formulation and later development of the plan of study. To Mrs. Sandra C. Howell of Saint Louis University and to Dr. Robert Buckhout of Washington University of St. Louis, thanks is given for help in developing interview instruments. To Mrs. M. Patricia O'Connor, of Washington University, acknowledgment is given for developing and conducting group interviews with professional personnel. The help of Dr. George R. Allen, of the George Washington University, in designing and overseeing the computer treatment of data is also acknowledged. A special note of thanks is reserved for Miss Penelope S. Bonsall, the George Washington University, who acted as research assistant throughout the study, and whose hard and meticulous work was invaluable.

SUMMARY

The objective of this study of the image and status of the library and information services field was to learn something about the attractiveness of an occupation. We were interested in how prestigious the library and information services profession appeared in comparison with other occupations. We were also interested in finding out something about the status of different types of job within the field as perceived by employed professionals and students in training for professional work. In line with that, it was also deemed appropriate to look at students who either had already chosen other professional fields, or who were not yet at that stage of their education, and to look for differences between their perception of the field and that of those who had already chosen the field.

While it was important to ask questions, both in written questionnaires and in group interview sessions, directly relating to status, it was equally vital to develop data about such specific elements of image as job attitudes and values, expectations and sense of advancement. In particular, the search was for contrasts between characteristics and attributes that might be thought of as "traditional" and those that could be seen as having a more change-oriented aspect.

The methodology of this study is described in detail in the Appendix. In brief, it consisted of devising written questionnaire instruments and, in the interests of economy and time, administering them by mail. Employed professionals working full-time in public libraries, school system libraries, college and university libraries, and in special libraries and science information facilities received mailed questionnaires. Groups were selected from this same sample to participate in group interview-seminar sessions, which obtained corroborating data and additional information. Students from graduate library schools in Dr. White's sample of schools received written, mailed questionnaires, as did non-library students sampled from some of the same institutions.

In general, the study showed a relatively close set of correspondence of attitudes of employed professionals and library students, but some decided dissonance between the aforementioned respondents and non-library students. Such evidence would, broadly, suggest that the field will need to take positive steps to change its image if it hopes to attract the kinds of people who, thus far, have chosen other professions.

INTRODUCTION

The studies of image and status of the profession were conducted with two different sets of instruments. The first of these was a battery of written test instruments administered by mail. These consisted of questions developed specifically for this study as well as adaptation of some of the instruments used in the Kilpatrick study of the federal service. The second set of instruments consisted of group interview-seminars, which were conducted by a psychologist from a sub-sample of the sample of employed professionals who had received the written instruments. Library school students received a somewhat shortened version of the same questionnaire given the employed professionals; non-library students received a slightly more abbreviated version.

The study design called for group-interview-seminars, which for obvious reasons of cost and time could not be conducted on a national, randomly-sampled basis. Since the study design with respect to employed professionals called for written and verbal materials from the same universe, it was decided to restrict sampling on a geographical basis. The following SMSA's were selected as sampling sites: St. Louis, Missouri (also used as the pretest site), Hartford-New Haven, Connecticut, Philadelphia, Pennsylvania, Denver, Colorado, Houston, Texas, and San Jose, California. For each area, a listing of the four major types of library-information service institution was obtained from the appropriate directories. Each institution was subsequently contacted and asked to furnish two lists: one of currently-employed professional personnel and the other of professional personnel who had left the employ of the institution within the past five years. The objective of the latter types of list was to develop a sample of "defectors," i.e. those who had left the field for other types of employment. Exhaustive detective work during pre-testing indicated a virtually total lack of "defectors," and the attempt to locate this type of respondent was abandoned in subsequent testing.

The response rate by institutions that were asked to furnish personnel lists was quite high--over 90 per cent. The response rate of employed professionals receiving mailed questionnaires was approximately 67 per cent. While this is a quite high return rate for a sample of a group of employed personnel, it raises the obvious question of non-response bias. Fortunately, this was not a problem. During the pretest period, follow-up was conducted for non-respondents, and an analysis of both biographic-employment data as well as the instruments themselves showed no significant differences between the respondent and non-respondent groups. The response rate to questionnaires sent to library school students was lower, and yet lower

for the non-library students.

In the pretest of the written questionnaires, the Leary Interpersonal Check List was employed. The purpose of using this instrument was to obtain measures of self-image, which could then be correlated with data from other instruments. Unfortunately, the Leary instrument did not prove usable in a mailed questionnaire, and was not used in the final testing. While it would have been useful to have that kind of data in the responses for this study, its absence was not viewed as critical, since an in-depth study of personality was being conducted by another principal investigator. It might also be noted that there was adverse reaction to the Leary instrument on the part of some respondents, who felt that it was "prying." No difficulty was experienced with any of the other instruments, either on pretest or final testing. Moreover, the instruments were all structured and of such a nature that bias was not a problem. All the basic instrument types had been thoroughly tested in other contexts prior to their use in this study.

The group interview-seminars, which involved close to 200 participants were extremely helpful. Not only did they give evidence that tended to corroborate and amplify the questionnaire data, but they allowed for direct probing into such areas as why and how people had entered the profession, whether they liked their work, the problems they perceived in working in the field, their attitudes towards change, and their concepts of needs in the field.

In the study, following, Part One deals with the sample of employed professionals. Part Two handles non-library and library students together. This was done deliberately, to point up some of the sharp contrasts in responses between non-library and library school students, the latter of whom responded, on the whole, similarly to the employed professionals. Unfortunately, because of the low response rate of the non-library students, a further sub-division of that group by the original sample categories would not have been statistically significant. Despite this lower response rate and our consequent inability to subdivide the non-library students, their inclusion is invaluable in that it sets in apposition groups who are committed to the field and those who are not.

PART ONE

EMPLOYED PROFESSIONALS

This portion of the study deals with how currently-employed professionals in the library and information services field perceive the status of their job. It also deals with related materials about job attitudes, ideal attributes of employment, sense of progress and expectation, and values in relation to work. Taken together, the findings indicate something of the attractiveness of the library and information services field as a profession.

Status Perceptions

In the questions summarized in Table 1, below, respondents were asked to rank the importance of various occupations, including librarian, against an arbitrary benchmark of "100" for high school teacher. They were also asked, in a separate instrument, to give their idea of how they thought the general public rated the same occupations. Table 1 thus compares what might be termed the respondents' explicit (their own ratings) vs their implicit perceptions (their idea of the general public's ratings) of the status afforded by the different occupations.

TABLE 1

LIBRARIANS' RANKINGS OF RELATIVE
IMPORTANCE OF SELECTED OCCUPATIONS
(High school teacher = 100)

<u>Occupation</u>	<u>Own rating</u>	<u>Perception of public's rating</u>
<u>Predominantly male</u>		
Physician.....	191*	240*
Lawyer.....	137*	200*
Corporation executive.....	134*	230*
Congressman/woman.....	147*	185*
Engineer.....	131*	172*
Electronics technician.....	99.	118*
Pharmacist.....	116*	121**
Computer programmer.....	101.	126
Retail store manager.....	83*	108*
Museum curator.....	99.	86*
<u>Predominantly female</u>		
Social worker.....	112.	89*
Librarian.....	123*	80*
Elementary school teacher.....	123*	94*
Nurse.....	123*	119* **

* Statistically significant at the 0.05 level using analysis at χ^2

** Difference not significant at 0.05 level; all other differences significant.

Employed professionals in the library and information services field gave the highest degree of relative importance to those occupations which would commonly be thought to have the highest status: physician, congressman/woman, lawyer, corporation executive, and engineer. The respondents also exhibited a moderately high explicit regard for their own profession, placing it at about mid-position, along with nurse and elementary school teacher.

There was, however, a strong dissonance between these explicit rankings and the respondents' ideas of the status given those occupations by the general public. In the first place, the five high-status occupations were perceived as being ranked even more highly by the general public. Secondly, although our professionally-employed respondents gave their own occupation a moderately high rating, they felt that the general public gave it the lowest rating of all the listed occupations. This perception ---that the public had little respect for the field of librarianship--- was corroborated in the group interview-seminar sessions. The consensus among participants in the group sessions was that the public very largely held the popular stereotype of the spinsterish, clerkish librarian. Some of the participants related that they had shared such feelings prior to their own involvement in the field.

Further evidence of the respondents' feeling that their field was held in low regard relates to the sex characteristics of the occupations. In both instruments, the highest-ranked occupations were those staffed predominantly by males. The respondents (who were over 75 per cent women) gave their own, explicit lowest rankings to predominantly male occupations. However, with the exception of museum curator, it was predominantly female occupations that, in their view, were ranked lowest by the general public.

While both written and oral data clearly indicated that librarians felt that the public saw their field as low status, there was no direct evidence to suggest that this lack of status acted as a deterrent in their choice of occupation. Nor was it directly significant in their satisfaction with their work. The group sessions, however, brought out a phenomenon not treated with in the questionnaires: when participants were asked why and how they entered the field, the almost overwhelming consensus was that the choice had not been a pre-planned one, and that entry had occurred as a derivative result of various combinations of personal circumstance.

There was some indication that low perceived status might play an indirect role in deterring entry into the library field. Non-library students (See Part Two of this study) gave their lowest "own" and "public" rankings to the occupation of librarian.

Status Within the Field

While employed professionals in the field showed a wide range of responses in their ideas of the status of different occupations, their perceptions of the relative importance of different types of job within their profession occupied a considerably narrower spectrum.

TABLE 2

LIBRARIANS' RANKINGS OF RELATIVE IMPORTANCE OF VARIOUS LIBRARY AND INFORMATION SERVICE JOB TYPES (Reference = 100)

Job type	Rating
Cataloging.....	113
Acquisition.....	112
Bibliography.....	106
Reference.....	100
Medical information specialist (not M.D.).....	123*
Serials.....	99
Elementary school librarian.....	105
Information systems analyst.....	130*
Company librarian.....	108
Circulation.....	91*
Rare books.....	95
Documents.....	104
Audio-visual or media specialist.....	104

*Statistically significant at 0.05 level analysis of X^2

Given the general ferment within the field relating to "innovation," it is significant, that of the job-types listed above, the two most "modern," requiring perhaps the highest amount of education, are given the most favorable ranking. The variations among the ratings given the remaining job types are small; but corroborative evidence derived from the group interviews suggested some additional factors. These are: (1) the college or university librarian was viewed as being of high status because of the librarian's association with the "academy," sometimes with a Faculty position; (2) elementary school librarian was universally regarded as having low status, often because the person assigned as a librarian was a "teacher who could not 'make it' in the classroom;" (3) the "newer" types of information service people, e.g. medical information specialists, systems analysts, and science information specialists were highly regarded because (a) they did not fear, and in fact were innovative in their use of modern technologies, (b) they were relatively free of traditional library conventions and methodologies, since they frequently came to the field from other disciplines; (c) they tended to be more oriented to problem-solving than other librarians, perhaps because of their backgrounds in other fields; (d) they were more highly regarded by the public at large; (e) they received (and deserved) greater

financial rewards and more rapid advancement. In this latter connection, group interview participants who were employed in science information facilities noted, that for women who were trained as scientists, employment in such a facility gave them more rapid advancement and better salaries within a private corporation than if they worked purely as science researchers. At the same time, men who were employed similarly tended to regard themselves not as librarians, but as scientific specialists who used information systems techniques to further their scientific work.

TABLE 3
DESIGNATIONS OF IDEAL VS ESTIMATES OF
ACTUAL TOP SALARIES IN SELECTED OCCUPATIONS
(Top administrators excluded)

<u>Occupation</u>	<u>Ideal salary</u>	<u>Estimated actual</u>
<u>(Within field)</u>		
College or university librarian	\$ 14,700.	13,300.
Science information specialist	14,400.	13,900.
Information systems analyst	14,400.	14,400.
Company librarian	13,200.	12,800.
Public librarian	13,200.	11,800.
Medical information specialist	13,100.	11,800.
School librarian	11,400.	9,800.
<u>(Outside of field)</u>		
Pharmacist	13,500.	13,000.
High school teacher	12,600.	10,700.
Computer programmer	12,400.	12,400.
Social worker	12,600.	10,000.
Nurse	11,000.	8,800.

NOTE: All differences significant at 0.05 level except "computer programmer" In the questionnaires summarized in Table 3, above, professionally employed respondents were asked to estimate the top salaries, excluding the top administrator, earned in each of the designated fields and then to designate what they thought should be the top salary available in each such occupation.

The data referred to are indirect indications of status perceptions, and (again indirectly) show congruence or dissonance between the status perceived by the general public vs librarians. The estimated actual salaries are indicative of the public's estimation of the value of different occupations as seen imperfectly by librarians, while the "ideal" salaries represent librarians' conceptions of the relative worth of the different jobs. Here we note that the jobs within the field that are seen by librarians as having high status are also, in their view, recognized by the public. This is shown especially with the close congruence between ideal and estimated

salaries for information systems analyst and science information specialist. At the same time, the other occupations within the field, including the highly-regarded university librarian, are significantly underpaid, according to our respondents. Another point worth noting: librarians apparently perceive the other service occupations that occur in a non-profit setting (high school teacher, social worker, nurse) as being underpaid.

Status as a Function of Job Performance Values

In the instruments summarized in Table 4, following, respondents were asked to rank, on a semantic differential scale, the occupations with respect to stated values of job performance. Two of these values (taking special initiative to fulfill clients' needs, cooperativeness in serving their clientele) relate directly to the service aspects of the listed occupations. Three (honesty, drive to get ahead, how well respected they are) are reflective of widely-shared American attitudes of important work values. The remaining two (professional expertise, innovativeness) relate to parameters general to the Library Manpower Research studies.

With the exception of the general social value of honesty, in which the rankings varied little by occupation, the results tended to confirm further the findings already noted. That is, the higher status occupations within the field were, on the whole, given higher scores with respect to each of the characteristics of performance. Thus, information systems analysts and science information specialists were seen as having more initiative in helping their clients, more drive to get ahead, more professional expertise, and more innovativeness than the other job types. They were followed closely by medical information specialists and university librarians. The two occupations, school librarian and (outside the field) social worker very clearly trailed the other job types with respect to virtually all aspects of job performance values, providing additional confirmation of the findings of previously summarized instruments.

Conclusions on Direct Status Measurements

Two distinct findings emerge from the information thus far summarized. The first of these is that librarianship is not viewed as a particularly high-status occupation. Although professionally-employed respondents gave their field a "moderate" ranking, their implicit grading of the field, done through the device of their perception of the public rating, was extremely low. There was no evidence, however, that this lack of status--or any positive conceptions of status--was a significant factor in their decision to enter and remain in the field. The second major finding is that there is a clear status hierarchy within the field, with academic librarians and the more technologically-oriented special librarians occupying top position, while the public librarian and school librarian being considered of lower status. It would thus appear, that insofar as a particular specialty or job type can be defined as "innovative," then, indeed, the less traditional and more innovative functions are highly regarded by working professionals.

TABLE 4

DIFFERENTIAL RATINGS OF JOB PERFORMANCE CHARACTERISTICS, BY OCCUPATION
(Scale: Extremely low = 1; Extremely high = 5)

Occupation	Performance characteristics*						
	Initiative	Honesty	Drive	Respected	Expertise	Cooper- ative	Innovative
(Within field)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
School librarian-----	-3.5	-4.1	-2.9	-3.0	-3.2	-3.6	-3.0
Medical information specialist-----	-4.0	-4.2	-3.7	-3.8	-4.1	-4.1	-3.5
Public librarian-----	-3.6	-4.1	-3.2	-3.2	-3.5	-3.8	-3.2
Company librarian-----	-4.2	-4.1	-3.8	-3.4	-3.8	-4.2	-3.5
Science information specialist-----	-4.2	-4.2	-4.1	-4.0	-4.2	-4.2	-3.9
College or university librarian-----	-3.9	-4.2	-3.7	-3.8	-4.0	-3.9	-3.4
Information systems analyst-----	-4.0	-4.1	-4.1	-4.0	-4.1	-4.0	-4.0
(Outside of field)							
Social worker-----	-3.7	-4.0	-3.3	-3.0	-3.5	-3.8	-3.1
High school teacher-----	-3.5	-4.0	-3.3	-3.4	-3.5	-3.6	-3.3
Nurse-----	-3.7	-4.0	-3.1	-3.4	-3.7	-3.8	-2.9
Computer programmer-----	-3.6	-4.0	-3.9	-3.7	-3.9	-3.8	-3.6
Pharmacist-----	-3.7	-4.0	-3.6	-3.7	-4.1	-4.0	-3.0

* Performance characteristics: (1) taking special initiative in fulfilling their clients' needs; (2) honesty; (3) drive to get ahead; (4) how well respected they are; (5) professional expertise; (6) cooperativeness in serving their clientele; (7) innovativeness.

NOTE: Reading vertically a difference of 0.2 or more is statistically significant at the 0.05 level.
Reading horizontally a difference of 0.3 or more is statistically significant at the 0.05 level.

Sense of Progress, Expectations

An indirect measure of the image of an occupation, and a more direct measure of the satisfactions derived from a job is in the sense of achievement, expectation, and progress a person has from his work. Table 5, below, summarizes six instruments in which a "ten-point, self-anchoring scale" was employed. In each instrument, the respondent was presented with a statement relating to something connected with his work and that the value "10" represented the best possible choice in relation to that statement. He was then asked to "rate" the statement against that "ideal" of "10." The closeness of the rating to the ideal value would then indicate the degree of satisfaction or agreement.

TABLE 5
INDEX OF SATISFACTION

<u>Item with maximum ideal value of 10</u>	<u>Average value rated by respondent*</u>
1. Respondent's present occupation-----	8.50
2. Respondent's job of five years ago-----	7.90
3. Job respondent expects to have five years hence---	8.62
4. Respondent's place of employment-----	7.87
5. Respondent's occupation as choice for son-----	6.21
6. Respondent's occupation as choice for daughter----	8.03

The responses to this set of questions are quite revealing, and in a somewhat paradoxical way illustrate further some of the negative aspects of the field's image among employed professionals. At first glance, the rating of 8.5 given in Item 1 would seem to indicate a high degree of job satisfaction. If "10" represented the occupation the respondent would most like to have were he given a choice (as the instrument stated), a value of 8.5 assigned to the present job would, indeed, be indicative of a high degree of satisfaction.

But, first of all, the picture is a static one. The index of satisfaction respondents afford their jobs of five years previously is only slightly below that of the "today" rating. Moreover, the respondent apparently has extremely small expectations for any increase in satisfaction, for he rates the job expected five years hence only scarcely above the current rating. Secondly, he rates the place of employment somewhat lower than he does any of his three ratings related to the occupation itself. This would indicate a greater degree of satisfaction with the profession than with the specific job.

*With the exception of Item 3-1 all differences are statistically significant at the 0.05 level.

The last two items are indicative of the respondents' aspirations. Presumably, most parents desire "the best" for their children. But the occupation of librarian, which was viewed as being quite satisfactory by the respondent for himself (or more properly, herself), is viewed as being decisively less satisfactory for a son. However, it would be almost as good for a daughter as it was for the respondent, herself.

This latter finding is an obvious function of the predominantly female characteristic of employment in the field, which was reflected in the sample. Spoken simply: the field is perceived as a quite suitable occupation for a female, but much less so for a male.

The group interviews provided some interesting variations on the male-female theme. All of the participants expressed awareness of the predominantly female employment patterns of the profession, although they felt that it was changing somewhat. In the first place, they noted, qualified males had much greater opportunities for advancement in the field, simply because of the profession's lack of such persons and some apparent desire to change that aspect of the field's image. Feeling was also expressed that males tended to pass over equally qualified females, ending up with administrative positions much more rapidly than was typical for females. It was suggested, in addition, that the field had to promote men more quickly, in order to retain them. Apparently the men had more options for other jobs and were also more likely to have had training in some substantive field.

It was felt, moreover, that men were more likely to have been exposed to information science and computer training and could thus qualify for some of the newer functions and jobs that were developing. Despite these expressions suggesting preferential treatment for males in a female field, many of the group interview participants were quick to state that discrimination in favor of males was much less true in the library-information service profession than in most other fields.

A somewhat trenchant note was introduced by a number of the men participating in the group sessions. They related, that when asked, in a social situation, about their occupation, they would tend to be evasive about being "librarians." For example, if they were public school librarians, they would answer that they were teachers. If employed by institutions other than public libraries, they would tend to identify the organization rather than their role in it.

Occupational Values and Attitudes to Work

What aspects about a job are important to members of the library and information services field? What specific kinds of occupational values are dominant? While answers to such questions are not direct indicators of the status of a field, they do give insights into the importance of work and work-related values.

TABLE 6
RANKING OF ATTRIBUTES OF JOB SITUATION

Rank	Item
1	Interest, enjoyment, satisfaction, pleasure
2	Do work that is worthwhile, useful, constructive
3	Sense of achievement or accomplishment
4	Challenge
5	Self-development, self-expression, creativity
6	Good relations with supervisors
7	Good active relations with people at work
8	Recognition for one's work
9	Variety, absence of routine or monotony
10	Self-advancement, progress
11	Responsibility for making decisions
12	Security, stability, fringe-benefits
13	Good physical environment and working conditions
14	Self-determination
15	Good passive relations with people at work

In the instrument summarized in Table 6, above, respondents were asked to place themselves in a situation where they could select the ideal conditions under which they would work and then to rank, from "1" to "15" the attributes of the job situation in their order of importance to them.

The first five items ranked would all be classified as reflective commonly-held and generally positive aspects of a job. It was significant that all three sample groups (see Part Two) were alike in ranking those five attributes from one to five, although in the case of library school students in slightly different order.

It appears, however, for librarians, that good relations with supervisors and co-workers, as well as some kind of recognition for work are of greater value than variety, self-advancement, and responsibility for making decisions. This reflects somewhat of a preference for what might be termed as passive, rather than a more active, initiative-oriented job value. The field is thus viewed by them as one in which, while they expect their jobs to be interesting and be of some challenge, they are almost equally

interested in a job situation in which they can "get along." Since they seem to prefer "getting along" to the more entrepreneurial attribute of taking responsibility or getting ahead, the attitude might well be described as being "bureaucratic."

Job Values

The final series of tests of employed professionals consisted of a set of statements on job values, which, with adaptations to the library field, were modeled closely after those used in the Kilpatrick study of the federal service. A semantic differential was used, and the respondent was asked to indicate, on a scale, his degree of agreement or disagreement with the statement.

As will be seen, the statements range over a wide area of by no means mutually exclusive categories. For purposes of analysis, they are broken down here into four (partly arguable) categories. These are: (1) job values that are related to a specific type of institution or type of work; (2) job values that have a social or interpersonal connotation; (3) self-oriented, ego-related values connected with work; and (4) general, job-oriented values. As should become obvious in the ensuing tables and discussion, a number of these statements could easily fit into two or more categories.

TABLE 7
INSTITUTIONALLY-ORIENTED JOB VALUES
(Scale: Disagree = 1; Agree = 5)

Value statement	Mean Rating*
1. All things considered, working for a library appeals to me.	4.3
2. Most people who work for a library do their best to serve the public.	4.2
3. A young person of ability who starts work in a library has a good chance of ending up in one of the top level jobs.	3.0
4. Employment with a large private business offers a high degree of security.	2.4
5. For a young person of ability, his best chance of being really successful lies in working for a library.	2.3
6. A young person of ability who starts work in a large private business corporation has a good chance at ending up in one of the top-level jobs	2.8

(Continued on next page.)

* A difference of 0.2 or more between any two items is statistically significant at the 0.05 level.

TABLE 7
(Concluded)

<u>Value statement</u>	<u>Mean rating</u>
7. All things considered, working for a large private business firm appeals to me.	3.2
8. Most jobs in libraries are routine and monotonous.	2.2
9. A person who works for a library generally has a good chance to get ahead.	3.7
10. Employment in a library offers a high degree of security.	3.0
11. Most jobs in private business are routine and monotonous.	3.5
12. A person who works for a large private business generally has a good chance to get ahead.	4.5
13. For a young person of ability, his best chance of being really successful lies in working for a large private business corporation.	2.8
14. For a young person of ability, his best chance of being really successful lies in setting up his own business.	2.2

These values can be compared by institution, or by drawing a "profile" of each institutional type by value statements. If we look first at the library and information service profession, we find: (1) respondents strongly agree that, on the whole, their occupation appeals to them; (2) their job is not routine and monotonous (moderate disagreement with the statement); (3) they moderately agree that there is a good chance of advancement in the field; but (4) they are neutral with respect to their chances at ending up in a top-level job; and (5) disagree that the profession offers the best chance of being truly successful. They are neutral on the subject of job security, but agree that their profession serves the public.

The two principal institutions compared are libraries and private business firms. Some of the comparisons are revealing. The respondents find library work, on the average, of greater appeal than working for a large business firm, jobs in which are seen to be more routine and monotonous than is library work. Working for a business offers less security than working for a library, and also slightly less chance at ending up in a top level job.

Working for a large business firm is seen strongly as offering a good chance to get ahead, but a library offers a very slightly greater chance of "being really successful." Owning one's own business offers a yet better chance of being successful, but note that all of the ratings for this value are on the "disagree" side of the scale.

TABLE 8
SOCIALLY AND INTERPERSONALLY-ORIENTED JOB VALUES
(Scale: Disagree = 1; Agree = 5)

<u>Value statement</u>	<u>Mean rating *</u>
1. To me, the only thing that matters about a job is the chance to do work that is worthwhile to society.	1.6
2. To me, a very important part of work is the opportunity to make friends.	3.0
3. To me, gaining the increased respect of my family and friends is one of the most important rewards in getting ahead in an occupation.	3.2
4. I would like my family to be able to have most of the things my friends and neighbors have.	3.3
5. The main satisfaction a person can get out of work is helping other people.	3.6
6. Work is a way of being of service to God.	3.0

* A difference of 0.2 or more between any two items is statistically significant at Table 8, above, summarizes responses to what might be classified broadly as socially-related job values. With the exception of the first item noted above, all of the values receive ratings indicating neutrality or only very slight agreement with the statement. In comparison with some distinct shadings of opinion about various aspects connected with working for one or another type of institution, our respondents simply do not have strong feelings one way or the other about these values. This set helps, however, to corroborate their rankings of the attributes of a job situation, (see Table 6, preceding) in which good relations with supervisors and co-workers were ranked at about mid-point. the 0.05 level.

It must be noted, moreover, that the mean ratings given to these job value statements reflect distributions which, with some notable exceptions, cluster closely around mid-point, or neutral ratings. This would indicate that the statements are really not of great importance to the respondents, in contrast to those for which stronger preferences, one way or the other, are expressed.

TABLE 9
SELF-ORIENTED JOB VALUES
(Scale: Disagree = 1; Agree = 5)

<u>Value statement</u>	<u>Mean rating*</u>
1. A person has the right to expect his work to be fun.	3.0
2. After you are making enough money to get along, then making more money isn't very important.	3.6
3. To be really successful in life, you have to care about making money.	2.7
4. To me, it's important in an occupation for a person to be able to carry out his own ideas without interference.	3.4
5. Sometimes it may be right for a person to lose friends in order to get ahead in his work.	3.1
6. Work should be the most important part of a person's life.	1.9
7. I like the kind of work you can forget about after the work day is over.	1.6
8. It is satisfying to direct the work of others.	2.7
9. A person should constantly try to succeed at work, even if it interferes with other things in life.	3.5
10. Getting recognition for my own work is important to me.	2.6
11. Work is a good builder of character.	3.6
12. To me, it's important in an occupation that a person be able to see the results of his own work.	3.6
13. Work helps you forget about your personal problems.	3.0
14. Even if you dislike your work, you should do your best.	3.7
15. To me, work is nothing more than a way of making a living.	2.6
16. To me, it's important to have the kind of work that gives me a chance to develop my own special abilities.	3.3
17. If a person doesn't want to work hard, it's his own business.	3.6
18. It would be hard to live with the feeling that others are passing you up in your occupation.	2.7

*A difference of 0.2 or more between any two items is statistically significant at the 0.05 level.

Table 9, preceding, summarizes responses to what are here classified as self-oriented values in relation to an occupation and towards what an individual expects for himself out of work. With most of the statements, responses clustered closely around neutrality, being skewed towards moderate agreement with most of the statements. It is, in the light of this clustering, important to examine those few values in which moderate or fairly substantial disagreement was shown.

The values that are oriented towards competitiveness (see numbers 3 and 17, Table 9) are disagreed with. Likewise, the value of work as being the dominant thing in a person's life is quite strongly disagreed with. Work does, however, have an important value to the respondents, since they very strongly disagree with the idea that it should be forgotten about once a person has left the job. However, there is only moderate disagreement that work means nothing more than making a living. Note also, that professionally-employed librarians moderately reject the generally-stated American entrepreneurial value of enjoying directing the work of others; nor do they think getting recognition for their work is terribly important. At the same time, they show slight agreement with the idea that work builds character and that one should do his best on a job even if he dislikes the work.

What does all this suggest? The data summarized in Table 9 point towards the inference that insofar as personal values towards work is concerned our respondents (1) are not competitive or aggressive; (2) do not care very much about making money; (3) expect little recognition for their work (how could they if they think the public regards their occupation so poorly?); but (3) are disciplined and somewhat conformist, i.e. they do agree with the idea of doing what is expected of them. A very general impression (and this is a matter of interpretation), is that librarians simply do not get much of their "kicks" from their work. Expressed somewhat differently, their image of the job is not oriented towards its ability to deliver personal satisfactions to them.

When these data are taken in conjunction with the group interview-seminars, however, a somewhat ambiguous picture is presented. In the group sessions, participants talked about a number of problems with their work, but virtually all of them overtly expressed getting a great deal of personal satisfaction from their work. One consultant who listened to all the tapes interpreted the constant, usually unsolicited, iteration of this theme as being "defensive" in character. When this interpretation is considered in the light of the almost accidental nature of entry into the profession, the idea of a field in which employees are not highly motivated and have low expectations begins to make more sense.

TABLE 10
GENERAL, WORK-ORIENTED JOB VALUES
(Scale: Disagree = 1; Agree = 5)

Value statement	Mean rating *
1. Success in an occupation is mainly a matter of hard work.	3.6
2. It's important to do a better job than the next person.	3.4
3. Success in an occupation is mainly a matter of luck.	2.1
4. Once a person has shown what he can do by working a number of years, he ought not to have to take a special degree to get a job.	2.3
5. Success in an occupation is mainly a matter of knowing the right people.	2.5
6. To me, it's important in an occupation to have the chance to get to the top.	4.1
7. Work is most satisfying when there are hard problems to solve.	2.1
8. It is more important for a job to offer opportunity than security.	3.2

*A difference of 0.2 between any two items is statistically significant at the 0.05 level.
The only statement in Table 10, above, with which strong agreement is shown is the importance of having a chance to get to the top. In the light of the other values and the almost resigned attitude that is suggested by the data in Table 9, this expression is somewhat surprising. The degree of agreement with the general value, however, begins to make sense when one compares it closely with similar statements relating specifically to libraries in Table 7, preceding. In those statements of value, respondents were neutral about the chance for anyone of ability to get a top job in a library, and they disagreed slightly with the idea that one could be really successful in a library. The difference between these two sets of values, one set being placed in a library setting, and the other expressed as a general job value or aspiration, suggests very strongly an image of the field that is negative in terms of its ability to satisfy that aspiration.

This apparent dichotomy between an ideal and the ability of the occupation to achieve the ideal was confirmed, somewhat, in the group interview-seminars. While, as noted before, entry into the field was generally fortuitous, the people entering it possessed something approaching a normal share of ambition and expectation. But feelings were expressed that this was a field that had become ossified and where the reality of much of its functions were routine, bureaucratic, or clerk-like. Change, and the chance to do something was, it was suggested, only

of fairly recent vintage.

Short Summary of Findings on Employed Professionals

All the items thus far treated illustrate a composite of the image or "picture" the field represents to its professional employees. While the respondents say little strongly and directly negative about their field, it is perhaps more significant that they express few highly positive feelings about it, either.

At best, the respondents' attitude towards the field might be described as one of ambiguous neutrality. Their statements on job values indicate some decided dissonances between their aspirations and the ability of the field to fulfill them. At the same time, their own aspirations seem to diverge somewhat from the supposedly competitive, achievement orientation that is generally thought to be characteristic of upward-mobile America.

What must be taken into account is, that for librarians as for others, statements of value and aspiration do not occur in a vacuum, but in part are a function of a person's interaction with his environment, including work. An example of this is provided by the instruments relating to job satisfaction, sense of progress, and expectations. It is difficult to believe, that in the abstract, before the often humbling and disillusioning experience of a job, that a person would not expect to advance. When we consider that our average respondent was an experienced professional, the fact that he shows feelings of having advanced very little and expecting to advance very little more can only be seen as a result of exposure to a field that is perceived as being static. It is not our purpose here to state whether or not the field is, by some objective measurement, static; but it certainly appears to have that image to its working professionals.

In a field that is perceived as static, it would be entirely beyond the realm of reasonable expectation for its members to hold to what, in the conventional wisdom, would be termed active, achievement-oriented values---either for the field, or for themselves in the field. The group interviews further confirmed the idea that the field's image to the outside world was not particularly dynamic. The group participants, on the whole, were quite clear that the field was not particularly attractive to bright, young, change-oriented people. While they seemed to feel that the field was doing an ineffective job in propagandizing the changes that were in fact occurring, they also expressed the idea that much of the reality of the field needed to change. This latter feeling was especially strong among those working in public school and public library settings.

PART TWO

GRADUATE LIBRARY VS OTHER COLLEGE STUDENTS

Introduction

This portion of the study compares the perceptions of graduate students studying for Master's degrees in Library Science with other college students. The other students, drawn from the same institutions as the library students, consist of (1) undergraduate students in colleges of liberal arts or arts and sciences; (2) candidates for the master's degree in business administration; (3) candidates for the first degree in law; (4) candidates for the master's degree in social work. It would have been extremely useful to compare each of these differing groups with the group of library students, but the final sample returns on each group were of insufficient size for proper statistical comparison. The general rationale for comparing library and non-library students was, simply, to see if there were important differences, not only in direct perceptions of the status of the various occupations, but also in other relevant attitudes, as between a group who had specifically chosen the profession and those who had not. The undergraduates, had we been able to treat them separately, could be viewed as a group who constitute a source of potential manpower in the field.

Status Perceptions

In Table 11, below, library and other students are compared with respect to their explicit ranking of the relative importance of various occupations. With but one exception, the library students give all occupations higher direct status rankings than do the non-library students. Both groups score the so-called high-status occupations at the top. Library students give librarian a rating of 124, just above the mid-point; but non-library students give librarian the lowest ranking---77. Interestingly, with the other predominantly female occupations the divergences are small between the two groups of students with the one notable exception of librarian.

As one might expect, library students give an explicit status ranking to their field very close to that given by professionally-employed librarians (See Table 1, Part 1). It is equally obvious, from the data, that non-library students see the world somewhat differently. They rank five occupations, including librarian, below the arbitrary "100" benchmark for high school teachers, compared with the library students who so rank only one occupation.

The hypothesis that librarianship is seen as a low-status occupation is further confirmed. While library students give a reasonably high explicit rating to the profession for which they are training, they, as do those already in the field, give it the lowest implicit rating. The non-library students, a minute sampling of the "general public" give the profession the lowest explicit and implicit status.

TABLE 11
RANKINGS OF RELATIVE IMPORTANCE
OF SELECTED OCCUPATIONS
(High School Teacher = 100)

<u>Occupation</u>	<u>Respondents</u>	
	<u>Library School</u> <u>Students</u>	<u>Other Students</u>
<u>Predominantly male</u>		
Physician	201	173
Lawyer	170	138
Corporation executive	144	128
Congressman/woman	158	160
Engineer	142	123
Electronics technician	102	88
Pharmacist	112	102
Computer programmer	104	92
Retail store manager	80	78
Museum curator	110	81
<u>Predominantly female</u>		
Social worker	114	113
Librarian	124	77
Elementary school teacher	109	113
Nurse	122	115

Note: 1. Using analysis at X^2 , entire distribution is statistically significant at 0.05 level.

2. With the exception of 'congressman/woman', "retail manager", and "social worker", all differences in ratings given by the two sample groups are significant at the 0.05 level.

Table 12, below, summarizes the two groups of students' responses to the question of how they think the public ranks the listed occupations. The general pattern of responses is similar to those given by the sample of employed professionals, i.e. the relative "public" ranking of the higher-status occupations was higher than the "own" ranking; and the lower-status occupations were given lower "public" than "own" rankings.

As was true with the "own" rankings, non-library students compressed the "top" of the "public" rankings in comparison with library school students. However, as is shown on Table 13, following, the differences between "public" and "own" rankings of the two student groups are, on the whole, similar. This indicates, that while non-library students "scale" status perceptions somewhat more conservatively than do the library students, they effect approximately the same degree of contrast between their explicit and implicit perceptions of status for the different occupations. What does stand out in Table 13 is the very small difference between the non-library students' two sets of perceptions of the status of librarians.

In Table 14, following, library school students only are responding to the question of their ranking of the relative importance of various specialties and job types within the field. In some slight contrast with the employed professionals (Table 2, Part One), they (1) do not rank the more highly-regarded types within the field quite so high as do the employed professionals, and (2) rank a greater number of the specialties below the arbitrary benchmark of "100" for "reference librarian" than do the professionals. Similarly to the professionals, however, they give the highest scores to information systems analyst and medical information specialist. This provides further confirmation, that within the general world of the library and information services field, the more modern and "innovative" specialties have higher status than the more traditional specialties that are usually departments or functions within a public library or college library.

As is shown in Table 15, following, library students do very much the same thing with their estimates of actual salaries in the field vs their designations of ideal salaries. Thus, the types within the field that receive the highest rankings in the within-field status instrument also are designated as (1) having the higher actual salaries, and (2) deserving the higher salaries. The library school students also give the university librarian top honors in the salary they should receive, although not in their estimates of actual salaries.

TABLE 12
RESPONDENTS' PERCEPTION OF HOW GENERAL
PUBLIC RANKS SELECTED OCCUPATIONS

(High School Teacher = 100)

<u>Occupation</u>	<u>Respondent's</u>	
	<u>Library School</u> <u>Students</u>	<u>Other Students</u>
<u>Predominantly male</u>		
Physician	249	227
Lawyer	225	186
Corporation executive	215	214
Congressman/woman	208	193
Engineer	178	164
Electronics technician	122	107
Pharmacist	130	125
Computer programmer	128	121
Retail store manager	108	104
Museum curator	87	67
<u>Predominantly female</u>		
Social worker	90	77
Librarian	83	68
Elementary school teacher	88	93
Nurse	124	116

Note: 1. Entire distribution is statistically significant using the analysis of χ^2 .

2. All differences in ratings given by the two sample groups are significant, with the exception of "corporation executive".

TABLE 13

"PUBLIC" MINUS "OWN" PERCEPTION OF RELATIVE
IMPORTANCE OF SELECTED OCCUPATIONS

<u>Occupation</u>	<u>Respondents</u>	
	<u>Library School</u> <u>Students</u>	<u>Other Students</u>
<u>Predominantly male</u>		
Physician	48	54
Lawyer	55	48
Corporation executive	71	86
Congressman/woman	50	33
Engineer	36	41
Electric technician	20	19
Pharmacist	18	23
Computer programmer	24	29
Retail store manager	28	26
Museum curator	23	14
<u>Predominantly female</u>		
Social worker	(24)	(36)
Librarian	(41)	(9)
Elementary school teacher	(21)	(20)
Nurse	2	1

TABLE 14
LIBRARY STUDENTS' RANKINGS OF RELATIVE IMPORTANCE OF
LIBRARY AND INFORMATION SERVICE JOB TYPES

(Reference = 100)

Job Type	Rating
Cataloging	98
Acquisition	103
Bibliography	101
Reference	100
Medical information specialist	117
Serials	88
Elementary school librarian	99
Information systems analyst	120
Company librarian	99
Circulation	77
Rare books	84
Documents	95
Audio-visual or media specialist	101

Note: The differences in rankings are not statistically significant except for (a) medical information specialist; (b) information systems analyst; and (c) circulation.

TABLE 15
LIBRARY STUDENTS' DESIGNATIONS OF IDEAL VS. ESTIMATES OF
ACTUAL TOP SALARIES IN SELECTED OCCUPATIONS

(Top administration excluded)

<u>Occupation</u>	<u>Ideal Salary</u>	<u>Estimated Actual Salary</u>
(Within field)		
College or university librarian	\$ 13,900	\$ 12,200
Science information specialist	13,500	12,800
Information systems analyst	13,800	13,400
Company librarian	13,000	12,200
Public librarian	12,700	10,500
Medical information specialist	13,200	11,900
School librarian	11,700	9,700
(Outside of field)		
Pharmacist	12,800	12,200
High school teacher	12,700	10,200
Computer programmer	12,000	11,700
Social worker	11,800	9,500
Nurse	10,900	8,500

Note: All differences between "ideal" and "estimated" are statistically significant at the 0.05 level.

TABLE 16

NON-LIBRARY STUDENTS' DESIGNATIONS OF IDEAL VS. ESTIMATES OF
ACTUAL TOP SALARIES IN SELECTED OCCUPATIONS

(Top Administration Excluded)

<u>Occupation</u>	<u>Ideal Salary</u>	<u>Estimated Actual Salary</u>
(Within field)		
College or university librarian	\$ 12,100	\$ 10,900
Science information specialist	11,400	10,600
Information systems analyst	12,500	12,300
Company librarian	9,100	9,400
Public librarian	8,400	9,400
Medical information specialist	10,400	9,600
School librarian	9,300	8,400
(Outside of field)		
Pharmacist	12,500	12,600
High school teacher	12,100	9,800
Computer programmer	11,400	12,000
Social worker	11,600	9,600
Nurse	10,800	8,800

Note: Except for information systems analyst, company librarian, and pharmacist, differences in "ideal", and "estimated" ratings are significant at the 0.05 level.

The sample of non-library students (See Table 16, above) treat status as measured by salaries somewhat differently than do the library students. Their treatment of salaries is an interesting confirmation of their responses to the direct status questions referred to earlier in that their designations of ideal and their estimates of actual top salaries are lower than those given by either employed professionals or library students. Moreover, unlike both other samples, the non-library students feel that certain occupations are being given too much, i.e. the salary they are actually getting is higher than the salary the respondents think they "should" get. This is the case for (1) public librarian, (2) company librarian, (3) pharmacist, and (4) computer programmer.

However, it is also the case, that in the relative salaries given the different library types by non-library students, they, too, demonstrate a higher regard for the more "modern" types and also afford the university librarian a high status. One possible word of explanation is in order for the apparent divergence in response between non-library students and the other two groups sampled: simply, that both employed professionals and those studying for the field are obviously likely to be more knowledgeable about actual salaries in their chosen field. Thus the divergence in salary designations for the library field is accompanied by a reasonably close convergence of salary estimates for the non-library occupations that are listed.

Tables 17 through 23, following, summarize a semantic differential treatment, in which both samples of students were asked to rate, on a scale, our list of occupations with respect to various job performance characteristics. For the library students, these instruments provide yet further confirmation of the within-field status gradings shown in the data previously noted. For the non-library students, however, these same instruments are indicative of some divergence with their earlier within-field status rankings. Apparently, when the point of reference is a specific (and in conventional terms, generally positive) job performance attribute, the non-library students tend to lump all the library-information service occupations together. Again, we would expect both employed professionals and library students to be more knowledgeable about the various job functions in the field and some of the performance characteristics relevant to them. This could account for the visible incongruity of the non-library students on the one hand affording certain classes within the field higher status, and on the other hand compressing those differentials within a much narrower range on the instruments currently under discussion.

TABLE 17
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"TAKING SPECIAL INITIATIVE IN FULFILLING CLIENTS' NEEDS"
BY OCCUPATION, LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student Respondents	
	Library	Non-library
School librarian	3.3	3.0*
Medical information specialist	4.0	3.3*
Public librarian	3.1	3.0
Company librarian	4.1	3.3*
Science information specialist	4.1	3.5*
College or university librarian	3.3	3.4
Information systems analyst	3.9	3.5*
Social worker	3.6	3.8
High school teacher	3.3	3.4
Nurse	3.6	3.6
Computer programmer	3.4	3.3
Pharmacist	3.4	3.3

TABLE 18
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"HONESTY," BY OCCUPATION, LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student Respondents	
	Library	Non-library
School librarian	3.9	3.8
Medical information specialist	4.0	3.6*
Public librarian	3.8	3.7
Company librarian	3.9	3.5*
Science information specialist	3.9	3.7
College or university librarian	3.9	3.8
Information systems analyst	3.9	3.6*
Social worker	3.7	3.7
High school teacher	3.6	3.6
Nurse	3.8	3.7
Computer programmer	3.7	3.5
Pharmacist	3.6	3.6

Note: In Tables 17 - 23, inclusive, a difference, reading vertically, of 0.02 or more is statistically significant at the 0.05 level.

Reading horizontally, all statistically significant differences between the two sample groups are asterisked.

TABLE 19
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"DRIVE TO GET AHEAD," BY OCCUPATION,
LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student respondents	
	Library	Non-library
School librarian	2.5	2.3
Medical information specialist	3.7	3.1
Public librarian	2.9	2.4
Company librarian	3.7	2.8
Science information specialist	4.0	3.4
College or university librarian	3.5	3.2
Information systems analyst	4.1	3.8
Social worker	2.9	3.1
High school teacher	3.0	3.2
Nurse	2.9	3.1
Computer programmer	3.7	3.8
Pharmacist	3.4	3.6

TABLE 20
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"HOW WELL RESPECTED THEY ARE," BY OCCUPATION,
LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student respondents	
	Library	Non-library
School librarian	2.6	2.8
Medical information specialist	3.7	3.4
Public librarian	2.7	2.8
Company librarian	3.4	2.7
Science information specialist	3.9	3.5
College or university librarian	3.5	3.5
Information systems analyst	4.0	3.6
Social worker	2.8	3.1
High school teacher	3.1	3.3
Nurse	3.2	3.4
Computer programmer	3.6	3.6
Pharmacist	3.6	3.6

TABLE 21
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"THEIR PROFESSIONAL EXPERTISE," BY OCCUPATION,
LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student respondents	
	Library	Non-library
School librarian	3.0	2.8
Medical information specialist	4.0	3.6 *
Public librarian	3.1	3.0
Company librarian	3.8	3.0 *
Science information specialist	4.1	3.8 *
College or university librarian	3.7	3.7
Information systems analyst	4.1	3.9
Social worker	3.3	3.4
High school teacher	3.2	3.4
Nurse	3.6	3.7
Computer programmer	3.8	3.8
Pharmacist	3.9	3.9

TABLE 22
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"COOPERATIVENESS IN SERVING THEIR CLIENTELE,"
BY OCCUPATION, LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student respondents	
	Library	Non-library
School librarian	3.4	3.3 *
Medical information specialist	4.1	3.5
Public librarian	3.4	3.4 *
Company librarian	4.2	3.4
Science information specialist	4.1	3.6 *
College or university librarian	3.4	3.6
Information systems analyst	4.0	3.7 *
Social worker	3.7	4.0 *
High school teacher	3.4	3.5
Nurse	3.7	3.8
Computer programmer	3.6	3.4
Pharmacist	3.8	3.6

TABLE 23
DIFFERENTIAL RATING OF JOB PERFORMANCE CHARACTERISTIC,
"INNOVATIVENESS," BY OCCUPATION, LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Extremely low = 1; extremely high = 5)

Occupation	Student respondents	
	Library	Non-library
School librarian	2.9	2.4 *
Medical information specialist	3.4	3.0 *
Public librarian	2.9	2.5 *
Company librarian	3.4	2.5 *
Science information specialist	3.8	3.3 *
College or university librarian	3.0	3.0
Information systems analyst	3.9	3.6 *
Social worker	3.0	3.4 *
High school teacher	3.0	3.3 *
Nurse	2.6	2.9 *
Computer programmer	3.3	3.4
Pharmacist	2.7	2.8

A further factor of difference between the library and non-library students is the generally lower scores the non-library students give library-information services classifications. This is in contrast with the closeness in ratings given the non-library occupations by both sample groups.

The conclusions on these measurements directly relating to the status of the field and of classes within the field can be summarized as follows: (1) Library school students perceive the status of the field in comparison with other field very similarly to the employed professionals; (2) they give the various within-field types very much the same gradings as do the employed professionals; (3) non-library students give the field the lowest status ranking in relation to other fields; (4) while non-library students tend to give somewhat the same within-field ordering as do the other groups, their scorings are (a) generally lower, and (b) less differentiated in contrast with the other samples.

Since non-library students tend, on the other hand, to give equal or higher ratings (on the semantic differentials) to the non-library occupations listed, the impression is strong, that it is almost as though the library-information service field is being singled out for "negative" treatment.

Occupational Values and Attitudes to Work

The following instruments do not measure directly the status of the field. However, occupational values provide some indication of (1) the meaning of various aspects related to work to the individual, and (2) something of the meaning of fields of work in relation to those values.

TABLE 24
RANKING OF ATTRIBUTES OF JOB
SITUATION, LIBRARY VS NON-LIBRARY STUDENTS

Item	Rankings by Student respondents	
	Library	Non-library
1. Interest, enjoyment, satisfaction pleasure	1	1
2. Do work that is worthwhile, useful, constructive	2	2
3. Sense of achievement or accomplishment	3	3
4. Challenge	5	4
5. Self-development, self-expression, creativity	4	5
6. Good relations with supervisors	7	12
7. Good active relations with people at work	6	11
8. Recognition for one's work	9	9
9. Variety, absence of routine or monotony.	8	6
10. Self-advancement, progress	12	8
11. Responsibility for making decisions	10	7
12. Security, stability, fringe benefits	13	14
13. Good physical environment and working conditions	14	13
14. Self-determination	11	10
15. Good passive relations with people at work	15	15

In Table 24, the results of asking the respondents to rank various attributes of the job situation are summarized. The order of items given is the ranking afforded by the sample of employed professionals, so the Table in effect summarizes the results for all three sample groups.

As can be seen, the library school students very closely parallel the employed professionals. This is to say, that like the professionals, they tend to place a higher order to attributes that reflect the idea of "getting along" than to those that might be thought of as "entrepreneurial" in character. This could be reasonably interpreted to mean that their expectations--what they would choose if they could---about a job, and about work very closely match those of their "elders" already in the field.

By contrast, the non-library students place a higher value on variety, self-advancement, and responsibility for making decisions than do the other two groups. Concomitantly, they give lower rank to good relations with supervisors and the interpersonal concept involved in the item, "good active relations with people at work." Thus, to some extent, the non-library students are more favorably inclined towards attributes that might be defined as entrepreneurial and aggressive.

While it would be stretching the evidence to infer that there are profound characterological and personality differences between the non-library students and those who are either in or have chosen the library-information services field, the data at the least suggest that there are attitudinal differences. The instrument summarized in Table 24 does not relate to a specific field; it does relate to a person's attitudes in a general sense about work. Since the attitudes of the non-library vs library groups differ, the next logical inference (assuming that attitudes have something to do with the kind of person one is) is that those who choose the library field differ as people from those who do not. Dr. Segal's study should shed more detailed light on this somewhat tenuous inference.

Job Values

Tables 25 through 28, following, summarize a semantic differential test of responses to statements about job values. As was done with employed professionals, they are classified here for the two student groups in terms of (1) institutionally-related job values; (2) job values that have a direct social or interpersonal connotation; (3) job values that are ego- or self-related; and (4) general values towards jobs and work. As was pointed out in Part One, preceding, these categories are not mutually exclusive and only partially defensible.

TABLE 25*
INSTITUTIONALLY-ORIENTED JOB VALUES
LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Disagree = 1; Agree = 5)

Value statement	Mean rating by Student respondents	
	Library	Non-library
1. All things considered, working for a library appeals to me	4.4	1.6
2. Most people who work for a library do their best to serve the public.	3.3	3.4
3. A young person of ability who starts work in a library has a good chance of ending up in one of the top level jobs.	3.5	2.7
4. Employment with a large private business offers a high degree of security.	2.8	3.0
5. For a young person of ability, his best chance of being really successful lies in working for a library	2.0	1.5
6. A young person of ability who starts work in a large private business corporation has a good chance at ending up in one of the top level jobs.	3.0	3.0
7. All things considered, working for a large private business firm appeals to me.	2.1	2.6
8. Most jobs in libraries are routine and monotonous.	2.6	3.5
9. A person who works for a library generally has a good chance to get ahead.	3.0	2.3
10. Employment in a library offers a high degree of security.	3.5	3.8
11. Most jobs in private business are routine and monotonous.	2.5	2.6
12. A person who works for a large private business generally has a good chance to get ahead.	3.2	3.1
13. For a young person of ability, his best chance of being really successful lies in working for a large private business corporation.	2.4	2.4
14. For a young person of ability, his best chance of being really successful lies in setting up his own business.	2.3	2.8

*Note: In Tables 25-28, inclusive, reading vertically, a difference in \bar{v} of 0.2 or more is statistically significant; reading horizontally a difference of 0.3 or more is statistically significant at the 0

With the institutionally-related job values summarized in Table 25, above, results are somewhat at variance with those thus far reported in comparisons of the three groups. Except for four statements where there is relatively close congruence between the employed professionals and the library students, the library students, on the whole, are closer to the non-library students than they are to the employed professionals. This finding is particularly striking when it is realized that the statements summarized in Table 25 are all institutionally related. Given most of the evidence about library students thus far presented, one would have hypothesized, that their job values, too--and especially those relating to their chosen profession---would have corresponded more closely to those held by their employed "elders."

Interestingly, while the library students do give higher scores to the library-related statements than do the other students, both student groups are quite close together in their scaling of most statements relating to private business. The only likely way of explaining this (and it is speculation) is to suggest that the non-library students share the general malaise about private business enterprise that is supposed to characterize large segments of student opinion. Since library students scale business-oriented statements lower, generally, than they do library-oriented values (as also do the employed professionals), the apparent correspondence in responses by the two student groups to the business-oriented statements just might be coincidental.

Table 26, below, summarizes responses by the two student groups to socially and interpersonally-related job values. Of the six value statements, four show a closer library student-nonlibrary student congruence than library student-employed professional congruence. Since these statements do not relate to any institutional setting, the suggestion of coincidence made in the preceding paragraph is not applicable to these statements. The two statements in which employed professionals and library students show congruence are those reflecting status with family and friends in relation to achievement on the job. The other four statements have a broader social orientation. One could thus speculate that these values are so general in nature, that factors other than occupational choice or interest (for example, age) are the chief determinants of the attitude.

Despite whatever attempts we might make to explain away this apparent pattern of congruence relating to job values between library and non-library students---and a comparative dissonance between library students and employed professionals--the pattern appears to have some consistency.

TABLE 26
 SOCIALLY AND INTERPERSONALLY ORIENTED
 JOB VALUES, LIBRARY VS NON-LIBRARY STUDENTS
 (Scale: Disagree = 1; Agree = 5)

Value statement	Mean rating by Student respondents	
	Library	Non-library
1. To me, the only thing that matters about a job is the chance to do work that is worthwhile to society.	3.2	2.9
2. To me, a very important part of work is the opportunity to make friends.	3.5	3.4
3. To me, gaining the increased respect of my family and friends is one of the most important rewards in getting ahead in an occupation.	3.1	3.4
4. I would like my family to be able to have most of the things my friends and neighbors have.	3.4	3.6
5. The main satisfaction a person can get out of work is helping other people.	3.8	3.7
6. Work is a way of being of service to God.	2.6	2.6

Table 27, following, summarizes responses to eighteen ego- or self-oriented job value statements. With the exception of one statement (item 6) in which congruence between employed professionals and library students is close, the pattern of closeness of response between library and non-library students becomes even more clear. In thirteen out of the eighteen statements, there is greater congruence between the two student groups than there is between library students and their professionally-employed "peers."

Most of the statements on Table 27 are related to what might be termed very personal attitudes and values about work. The close congruence of the two student groups, coupled with their divergence from the employed group confirms the proposition advanced earlier that statements of attitude are conditioned by experience, including job experience. One would expect the student values to be a bit more "fresh" or naive. But when one looks at some of the specific statements, one could just as easily derive the idea that in some senses the students are, if anything, more sophisticated than the professionally-employed group.

TABLE 27

SELF-ORIENTED JOB VALUES, LIBRARY VS NON-LIBRARY STUDENTS

(Scale: Disagree = 1; Agree = 5)

Value statement	Mean rating by Student respondents	
	Library	Non-library
1. A person has the right to expect his work to be fun.	3.6	3.4
2. After you are making enough money to get along, then making more money isn't very important.	3.1	2.9
3. To be really successful in life you have to care about making money.	2.1	2.3
4. To me, it's important in an occupation to be able to carry out your own ideas without interference.	3.4	3.4
5. Sometimes it may be right for a person to lose friends in order to get ahead in his work.	2.1	2.4
6. Work should be the most important part of a person's life.	2.0	2.4
7. I like the kind of work you can forget about after the work day is over.	2.9	2.8
8. It is satisfying to direct the work of others.	3.2	3.7
9. A person should try to succeed at work even if it interferes with other things in life.	2.3	2.6
10. Getting recognition for my own work is important to me.	3.6	3.9
11. Work is a good builder of character.	3.3	3.4
12. To me, it's important in an occupation that a person be able to see the results of his own work.	4.0	4.2
13. Work helps you forget about your personal problems.	3.1	3.0
14. Even if you dislike your work, you should do your best.	4.1	3.7
15. To me, work is nothing more than a way of making a living.	1.5	1.6
16. To me, it's important to have the kind of work that gives me a chance to develop my own special abilities.	4.2	4.3
17. If a person doesn't want to work hard, it's his own business.	3.2	3.4
18. It would be hard to live with the feeling that others are passing you up in your occupation.	3.3	3.7

TABLE 28
GENERAL, WORK-ORIENTED JOB VALUES, LIBRARY VS NON-LIBRARY STUDENTS
(Scale: Disagree = 1; Agree = 5)

Value statement	Mean rating by Student respondents	
	Library	Non-library
1. Success in an occupation is mainly a matter of hard work.	3.4	3.6
2. It's important to do a better job than the next person.	3.0	3.2
3. Success in an occupation is mainly a matter of luck.	1.7	1.7
4. Once a person has shown what he can do by working a number of years, he ought not to have to take a special degree to get a job.	2.9	3.1
5. Success in an occupation is mainly a matter of knowing the right people.	2.3	2.7
6. To me, it's important in an occupation to have the chance to get to the top.	3.0	3.8
7. Work is most satisfying when there are hard problems to solve.	3.6	3.8
8. It is more important for a job to offer opportunity than security.	3.6	3.7

In Table 28, above, response scores by the two student groups to general statements of job value are summarized. Of the eight statements, the pattern of congruence between the two student groups is illustrated by four (items 3,4,7,8). In two other statements (items 1 and 6) there is congruence between the employed professionals and the nonlibrary students. Item 5 shows a congruence between library students and the employed professionals, reflecting their stronger emphasis on interpersonal aspects of employment (see Tables 6 and 24, preceding).

Taking all the job value statements together, the pattern of congruence between the two groups of students and some dissonance between the student groups of the employed professionals is clear. With a few exceptions, however, the differences are really more of degree than of kind. Thus, we cannot say that the conclusions on job values with respect to students would differ totally and sharply from those relating to the employed professionals.

PART THREE

CONCLUSIONS

The evidence brought together in Parts One and Two of this report suggest some strongly negative aspects to the image and status of the library and information services field. This was true with respect to those individuals already working in the field and those who had elected to prepare themselves for professional roles in the field. What was true for those who had chosen or were working in the field was even more true for the group of nonlibrary students, who really constitute two sub-groups: (1) those who had already chosen another field and were in advanced study for it; and (2) those who were still in undergraduate school and could conceivably constitute a potential source of manpower for the field if they perceived the field as being sufficiently attractive.

It should be more than obvious from the evidence, that there is little in the library and information services field that is seen as attractive by the nonlibrary students. In all the instruments relating to status, it was almost totally clear that their regard for the field was low. While the nonlibrary students tended to "grade" the more modern specialties, such as science information specialist, at a higher level than the more "traditional" classes, their scaling of within-field differences was "compressed" in comparison with the other two groups. This tendency by the non-library students to "lump" all types of library-information service functions and personnel closely together suggests strongly that the broad, general stereotypes about libraries and librarians are still prevalent. The field, simply, has not gotten across the message that there are in fact new job functions and types of institutional setting that could be perceived as being more attractive.

While we cannot prove conclusively that a negative image, per se, is a direct deterrent to entry into the field, the fact that the respondents with the more negative images had not chosen the field is at least suggestive. Presumably, if the field could take steps to improve its image, it could at least improve its probabilities of attracting new people.

If the field projected a rather negative image to those who had not chosen it, neither did it project a strongly positive image to those who were already working in it. The low implicit status ranking by employed professionals, coupled with a virtually non-existent sense of progress and expectations and a decidedly bureaucratic, almost conformist approach to job attributes and values can hardly be viewed as encouraging. The further fact that

library students also did not project a strongly positive view of the field is not encouraging either.

In looking at the evidence from the three groups sampled, one finding does emerge that is at the same time encouraging and should serve as a word of warning to the field. Students in graduate library programs have essentially the same status perceptions concerning the field as do employed professionals; but their job values are different. While these differences were not exceedingly sharp, they were generally in the direction of reflecting a somewhat more aggressive, achievement-directed orientation, in some contrast with the almost ambiguous neutrality displayed by the professionals.

The job values reflect both attitudes towards work and something of the aspirations a person has towards their work. This could well mean that library students have chosen the field despite their apparent feeling of its relatively low status. If their job values, which represent some statement of the way in which they approach their work are then more "positive" than those of their prospective peers, the implication is that they are much more likely to be receptive to change and innovation and even to be agents of change than most of those who have already been in the field some period of time.

The suggestion embodied in this line of thinking is that the library students--those who are about to enter the field--are in some respects different in what they expect from their work than those already in the field. The word of warning to the field is, that if it fails to respond to those differences and to utilize the potential for change that is inherent in them, it will effectively foreclose itself from changing its image to those--like our non-library students--who have not yet been reached. While the field should, by all means, try to stress the "newer" elements in it, the objective reality of its structure and functioning so aptly reflected in the attitudes of its professional personnel must also change.

A P P E N D I X

SAMPLING PROCEDURES

Employed Professionals

Because one of the major methods of obtaining information about employed professionals in the field was to be a series of group interview seminars, geographical concentration was deemed necessary as an economy measure. Accordingly, six Standard Metropolitan Statistical areas (SMSA's) were selected: (1) St. Louis, Missouri; (2) Denver, Colorado; (3) Hartford-New Haven, Connecticut; (4) Philadelphia, Pennsylvania; (5) Houston, Texas; (6) San Jose, California.

The six areas were chosen to represent (1) a spectrum of regions within the United States, although every Census Area was not sampled; (2) a range of SMSA sizes; and (3) a diversity in terms of type of industrial and employment characteristics, population composition, ethnic variety, and faster vs slower-growing areas.

From each SMSA, by using all available directory sources, a complete enumeration was made of all known library and information service institutions within the following classifications: (1) public libraries, including city-wide and county-wide systems and branches thereof, branches and departments of systems, individual libraries in one-library communities; (2) public school library systems and units; parochial school library systems and units; (3) academic (college, university, community college, junior college) library systems including departmental libraries, where listed; (4) special libraries, including company libraries, science information facilities, medical libraries and medical information facilities, and parts of academic or public systems that were listed as special libraries.

Thus, all the known library and information service facilities as classified above constituted, within each SMSA, a universe for sampling purposes. Each such institution was contacted by mail, with mail and telephone followups, and asked to furnish a list of its fulltime, professional personnel, including department and division heads, but excluding directors or chief librarians. Once having obtained the roster of institutions and personnel within them, for each SMSA a random sample was taken of the institutions, and then within each institution a complete enumeration was made of all professionally-employed personnel. The tables following, show (1) the composition of the returns from the sample; and (2) various characteristics of that sample.

TABLE 29
RETURN RATE, EMPLOYED PROFESSIONALS

Total number of questionnaires sent.....	800
Usable questionnaires returned.....	536
Return rate (per cent).....	67%

TABLE 30
COMPARISON OF UNIVERSE AND SAMPLE BY TYPE OF INSTITUTION
(In percentages of total personnel)

<u>Type of institution</u>	<u>Universe</u>	<u>Sample</u>
Public libraries & systems	40%	45%
School libraries & systems	20	12
Academic libraries	20	28
Special libraries	20	15
	n = 800	n = 536

TABLE 31
RETURN RATE, BY METROPOLITAN AREA

<u>MSA</u>	<u>Return rate</u>
St. Louis	14%
Denver	20
San Jose	8
Philadelphia	31
Houston	15
Hartford-New Haven	12
	n = 536

TABLE 32
CHARACTERISTICS BY SEX AND MARITAL STATUS

<u>Characteristic</u>	<u>Percent of sample</u>
Male	24%
Female	76%
Married	51%
Single	39%
Widowed or divorced	10%

TABLE 33
EDUCATIONAL BACKGROUND OF PARENTS

<u>Highest grade achieved</u>	<u>Percentage of sample</u> (n = 536)
<u>By father</u>	
Sixth grade or less	2.6%
Seventh & eighth grades	27.5%
Ninth through twelfth grades	32.8%
One to four years of college	30.3%
More than four years of college	6.8%
<u>By mother</u>	
Sixth grade or less	1.7%
Seventh & eighth grades	19.0%
Ninth through twelfth grades	44.3%
One to four years of college	28.6%
More than four years of college	6.4%

TABLE 34
AGE DISTRIBUTION OF SAMPLE

<u>Age to nearest birthday</u>	<u>Percent of sample</u>
Under 25	13.5%
26 - 35	26.4
36 - 45	25.8
46 - 55	24.6
Over 55	9.7

TABLE 35
UNDERGRADUATE EDUCATION OF SAMPLE

<u>Degree or major field</u>	<u>Percent of sample</u>
No college education	4.5%
Two year degree in applied field	0.4
Natural sciences	9.4
Social sciences	7.3
Humanities	42.1
Applied fields, excluding library science	16.9
Library science	19.4

TABLE 36
FATHER'S OCCUPATION

<u>Type of occupation</u>	<u>Percent of sample</u>
Library professional.....	0.2 %
Professional.....	40.9
Managers, officials.....	15.4
Clerical.....	2.6
Sales worker.....	5.6
Operative.....	10.3
Private household.....	0.4
Service worker.....	7.5
Laborer.....	15.2
N/A.....	1.9

TABLE 37
LENGTH OF EMPLOYMENT IN LIBRARY FIELD

<u>Number of years</u>	<u>Percent of sample</u>
5 or less.....	36.3 %
6 - 10 years.....	19.3
11 - 15 years.....	12.8
16 - 20 years.....	11.5
21 or more.....	21.1

$\bar{x} = 11.6$ years

TABLE 38
EMPLOYMENT, BY JOB FUNCTION

<u>Function</u>	<u>Percent</u>	<u>Function</u>	<u>Percent</u>
Director, admin- istrator.....	5.6	Information spec- ialist.....	3.4
Assistant librarian...	6.9	School librarian..	8.1
Branch librarian.....	13.1	Teacher-librarian.	0.8
Serials.....	0.4	Computer specialist.	1.3
Cataloging.....	6.2	Technical depart- ment head.....	7.9
Acquisitions.....	3.2	Public services.....	7.3
Reference.....	10.7	Interlibrary loans..	2.1
Documents.....	1.9	Archives, manuscripts, special collection.	4.7
Circulation.....	2.3	All others.....	4.5
Head of above depart- ments.....	8.6		

Library School Students

TABLE 39

SAMPLE RETURN, BY INSTITUTION
(n = 300)

<u>Institution</u>	<u>Percentage</u>
Kent State, Ohio	12.3%
University of Illinois (Urbana)	24.3
University of Maryland	14.3
Syracuse University	14.7
University of Texas	10.0
University of California (Berkeley)	11.0
University of Denver	12.7
N/A	0.7

TABLE 40

SEX AND MARITAL STATUS

Male.....	16%
Female.....	84%
Married.....	48%
Single.....	44%
Widowed or divorced.....	8%

TABLE 41

UNDERGRADUATE EDUCATION

<u>Undergraduate degree or major</u>	<u>Percent of sample</u>
Natural science	8.3%
Social science	9.7
Humanities	53.3
Applied fields	24.7
Library science	3.7
N/A	0.3

Other College Students

TABLE 42
SAMPLE RETURN, BY INSTITUTION
(n = 184)

<u>Institution</u>	<u>Return rate</u>
University of Texas	28.6%
University of Illinois	44.0
University of California	13.1
Drexel University (Philadelphia)	13.1
N/A	1.2

TABLE 43
SEX AND MARITAL STATUS

Male.....	64%
Female.....	36%
Married.....	62%
Single.....	36%
Widowed or divorced.....	2%

TABLE 44
MAJOR FIELD UNDER CURRENT STUDY

<u>Field</u>	<u>Percent</u>
Graduate social work	35.9%
Law school	20.5%
Graduate business administration	25.3%
Undergraduate liberal arts & sciences	19.3%

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catcher
August, 1968

Dear Friend:

We would like your help in this survey, which is part of a nation-wide study of the Library and Information Services field. This study is supported financially by the U. S. Office of Education and is administered by the School of Library and Information Services of the University of Maryland.

All of your answers will be treated as **strictly confidential**, and any report based on them will be presented in anonymous or statistical form.

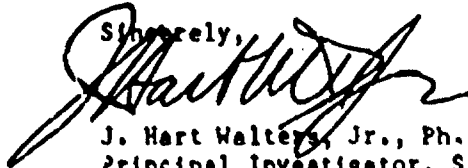
In addition to this written questionnaire, you may be contacted and requested to participate in an individual or group interview situation. Your cooperation is respectfully requested.

This questionnaire should take less than an hour of your time.

If you received this questionnaire directly, through the mails, please return in the enclosed, stamped envelope after you have completed it. If you received the questionnaire from someone within your organization, please return it as instructed.

Again, let us thank you for your cooperation.

Sincerely,



J. Hart Walters, Jr., Ph. D.
Principal Investigator, Study E
School of Business Administration
Temple University
Philadelphia, Pennsylvania 19122
(215) 787-8151

Date _____, 1968

QUESTIONNAIRE

(Respondents please fill out anonymously)

PERSONAL HISTORY FORM

Code number: _____. Age _____. Sex _____. Marital status _____.
How many brothers do you have? _____. How many **older** brothers? _____.
How many sisters do you have? _____. How many **older** sisters? _____.
Birthplace _____.
Highest grade in school reached by your father. _____.
Highest grade in school reached by your mother. _____.
What is, or was your father's major occupation? _____.
If your mother worked, what was her major occupation? _____.
Was it on a full-time or part-time basis? _____.

EDUCATION

Name & location of high school _____ Date graduated _____

Name & location of college or university _____ Major subject(s) Degree & Date
(Undergraduate)

(Graduate)

* If degree not yet received, indicate degree and anticipated date.

Please list any academic fellowships, scholarships, grants or awards and the dates you received them.

WORK HISTORY

For your **present job**, please indicate:

Date started work with present employer: _____.

Name & location of employer: _____.

Job title (Be specific): _____.

Brief description of your responsibilities: _____.

If, with the **same employer**, you have held job titles or positions other than your present one, please indicate:

Job title	Dates	
	Started	Ended
_____	_____	_____

For **all other jobs** you have held since high school, please list, starting from the latest and working backward in time: (Exclude part-time jobs).

Employer	Job title	Dates	
		Started	Ended
_____	_____	_____	_____

PROFESSIONAL ACTIVITIES

1. Please list all professional associations, if any, that you have belonged to. If you have been an officer in any of them, please so indicate.

<u>Name of Association</u>	<u>Dates of Membership</u>
----------------------------	----------------------------

2. Please list all professional periodicals or journals to which you subscribe, or which you regularly read.

We would like to get an idea of how important **you** think certain occupations are. We will arbitrarily "rate" one of the occupations -- high school teacher - at 100. As for the **other** occupations; if you think one of them is, say, **half** as important as the high school teacher, then rate it at **50**; if you think that it's **twice** as important, rate it at **200**; if you think it's **1½** times as important, rate it at **150**---and so on. Use whole numbers, decimals, fractions--whatever you need to be accurate. If you think some occupation is not important at all, rate it at **zero**. If you think that two or more occupations are **equally** important, they can be given the same number. Remember: we are interested in how important **you** rate these occupations.

Social worker	_____
Lawyer	_____
Corporation executive	_____
Librarian	_____
High school teacher	<u>100</u>
Engineer	_____
Retail store manager	_____
Computer programmer	_____
Elementary school teacher	_____
Museum curator	_____
Congressman or congresswoman	_____
Pharmacist	_____
Electronics technician	_____
Physician	_____
Nurse	_____

On the last page, we asked for **your** ranking of how important **you** felt certain occupations are. Now we'd like to ask you how you think the **general public** ranks these same occupations. Remember: we are arbitrarily giving the high school teacher a ranking of **100**. If you think that the general public rates some other occupation twice as important, rate it at 200; half as important - 50; $1\frac{1}{2}$ times as important - 150; and so on. If you think that the general public feels an occupation is not important at all, rate it at zero. If you think that the general public would feel that two or more occupations are **equally** important, give them the same number. **Important:** please **do not** look back at what you put down on the previous page.

Social worker	_____
Lawyer	_____
Corporation executive	_____
Librarian	_____
High school teacher	<u>100</u>
Engineer	_____
Retail store manager	_____
Computer programmer	_____
Elementary school teacher	_____
Museum curator	_____
Congressman or congresswoman	_____
Pharmacist	_____
Electronics technician	_____
Physician	_____
Nurse	_____

III.

We'd like to get an idea of how important **you** think certain types of people in the library and information services field are. We will arbitrarily rank **reference** at **100**. If you think some other job is **twice** as important as reference, rank it at **200**; if you think that it is **half** as important, rank it at **50**; if you think that it's **1 1/2** times as important, rate it at **150**, and so on. Use whole numbers, decimals, fractions--whatever you need to be accurate. If you think some occupation is not important at all, rate it at **zero**. If you think two or more occupations are **equally** important, they can be given the same number. Remember: we are interested in how important **you** rate these occupations.

Cataloging	_____
Acquisition	_____
Bibliography	_____
Reference	<u>100</u>
Medical information specialist	_____
Serials	_____
Elementary school librarian	_____
Information systems analyst	_____
Company librarian	_____
Circulation	_____
Rare books	_____
Documents	_____
Audio-visual or media specialist	_____

IV.

If you could work in an ideal situation with the ability to select the ideal conditions under which you would work, how would you rank the following attributes of the job situation? Please rank the items in the following manner: First, put the number 1 opposite the item that is most important to you; second, put the number 15 opposite the item that is least important to you; third, put the number 2 opposite the item that is second in its importance to you; then put the number 14 opposite the item that is second to last in how important you think it is---and so on.

<u>Item</u>	<u>Rank</u>
a. Interest, enjoyment, satisfaction, pleasure	_____
b. Security, stability, protection, fringe benefits	_____
c. Good physical environment & working conditions	_____
d. Good relations with supervisors	_____
e. Good passive relations with people at work	_____
f. Good active relations with people at work	_____
g. Self-advancement, progress	_____
h. Recognition for one's work	_____
i. Self-development, self-expression & creativity	_____
j. Self-determination	_____
k. Responsibility for making decisions	_____
l. Challenge	_____
m. Sense of achievement or accomplishment	_____
n. Variety, absence of routine or monotony	_____
o. Do work that is worthwhile, useful, constructive	_____

V. On the left hand side of this page is a "ladder" numbered, top to bottom, from 10 to 1. Think of "10" as the occupation that you would like best if you could have your choice today. Then, think of "1" as the occupation you would least prefer to have today. Now, rank **your own present occupation** by placing a check-mark next to the number that would most closely correspond with how you would rank it between "best" and "least." (If your own present occupation is "best" or "least" as far as you are concerned, rank it accordingly.

10
9
8
7
6
5
4
3
2
1

VI. Now, if you were working five years ago, think carefully of what you were doing then. Where on the "ladder" would you have put your job of five years ago, remembering that "10" would be the occupation you would have liked best and "1" the job you would have preferred least? (Place a check mark next to the number).

10
9
8
7
6
5
4
3
2
1

VI-A. Now, thinking of your occupational future (forget this question if you expect to retire within five years), opposite what number on the "ladder" would you check the occupation you ~~expect~~ to have five years from now? (Remember: 10 = what you would like to do best; and 1 = the job you would least prefer to do).

10
9
8
7
6
5
4
3
2
1

VII. Suppose that your basic work or occupation remained the same, but that you were free to choose what, to you, would be the ideal place of employment. Think of the ideal place of employment in your present occupation as being the number 10 on the "ladder" and "1" as being the worst place you could work at your present occupation. In relation to that, where would you rank your present place of employment? (Check-mark opposite the number).

10
9
8
7
6
5
4
3
2
1

IX-A. Suppose you had a son just getting out of school. Think of the number "10" as representing the occupation that you would suggest to him as the best choice he could make for his life work. Think of "1" as being the worst choice he could make. Suppose now that he was going to choose **your** own present occupation. Where would you rank that between 10 and 1?
(Check-mark)

10
9
8
7
6
5
4
3
2
1

IX-B. Suppose you had a daughter just getting out of school. Think of 10 as representing the occupation that you would suggest to her as being the best choice she could make for her life work. Think of 1 as being the worst choice she could make. Suppose that she was going to choose your own present occupation. Where would you rank that between 10 and 1? (Checkmark)

10
9
8
7
6
5
4
3
2
1

X.

Excluding the top administrator, what do you think is the top salary per year that can be earned in the following occupations? If you think you know for certain, place your answer under "sure"; if you feel you have general, but not necessarily very exact knowledge, place your answer under "estimate;" if you feel you really don't know at all, make a guess and place your answer under "guess."

	<u>Sure</u>	<u>Estimate</u>	<u>Guess</u>
School librarian	_____	_____	_____
Medical information specialist (Not M.D.)	_____	_____	_____
Public librarian	_____	_____	_____
Company librarian	_____	_____	_____
Science information specialist	_____	_____	_____
College or university librarian	_____	_____	_____
Information systems analyst	_____	_____	_____
Social worker	_____	_____	_____
High school teacher	_____	_____	_____
Nurse	_____	_____	_____
Computer programmer	_____	_____	_____
Pharmacist	_____	_____	_____

Now, excluding the top administrator, what salary do you think should be the top salary for each of these occupations?

School librarian	_____
Medical information specialist (Not M.D.)	_____
Public librarian	_____
Company librarian	_____
Science information specialist	_____
College or university librarian	_____
Information systems analyst	_____
Social worker	_____
High school teacher	_____
Nurse	_____
Computer programmer	_____
Pharmacist	_____

ITEM 11-A

Now, we'd like you to consider the occupations listed below. On the average, how would you rank each of them on their **taking special initiative in fulfilling their clients' needs.**

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (not M.D.)

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Next, we'd like you to rank each of the same occupations on their honesty.

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (Not M.D.)

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Next, we'd like you to rate each of these same occupations. On the average, how would you rate them on their drive to get ahead.

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (Not M.D.)

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Now, we'd like you to rate each of these occupations. On the average, how would you rate them on **how well respected they are?**

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (not M.D.)

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

On the average, how would you rate each of the following occupations on their professional expertise?

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (not M.D.).

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

On the average, how would you rate each of the following occupations on cooperativeness in serving their clientele?

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (not M.D.)

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

On the average, how would you rate each of the following occupations
on **innovativeness**?

School librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Medical information specialist (not M.D.)

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Company librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Science information specialist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

College or university librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Information systems analyst

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Social worker

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

High school teacher

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Nurse

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Public librarian

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Computer programmer

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

Pharmacist

Extremely low ____:____:____:____:____:____:____:____:____:____: Extremely high

On the following four pages are a series of statements that says something about jobs or occupations. Please "rate" each statement by placing "X" at the point along the scale which most closely corresponds with your degree of agreement or disagreement with the statement. If you **completely disagree**, you should place your "X" in the blank all the way to the left; if you **completely agree**, your "X" should be placed in the blank all the way to the right.

EXAMPLE:

The most important thing about a job is the salary.

Disagree ____:____:____:____: **X** :____:____:____:____: Agree

Once you have marked these statements, you will have completed this questionnaire. Thank you for your time and cooperation.

- A. ALL THINGS CONSIDERED, WORKING FOR A LIBRARY APPEALS TO ME.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- B. TO ME, THE ONLY THING THAT MATTERS ABOUT A JOB IS THE CHANCE TO DO WORK THAT IS WORTHWHILE TO SOCIETY.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- C. A PERSON HAS THE RIGHT TO EXPECT HIS WORK TO BE FUN.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- D. SUCCESS IN AN OCCUPATION IS MAINLY A MATTER OF HARD WORK.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- E. MOST PEOPLE WHO WORK FOR A LIBRARY DO THEIR BEST TO SERVE THE PUBLIC.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- F. IT'S IMPORTANT TO DO A BETTER JOB THAN THE NEXT PERSON.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- G. AFTER YOU ARE MAKING ENOUGH MONEY TO GET ALONG, THEN MAKING MORE MONEY IN AN OCCUPATION ISN'T VERY IMPORTANT.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- H. A YOUNG PERSON OF ABILITY WHO STARTS WORK IN A LIBRARY HAS A GOOD CHANCE OF ENDING UP IN ONE OF THE TOP LEVEL JOBS.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- I. EMPLOYMENT WITH A LARGE PRIVATE BUSINESS OFFERS A HIGH DEGREE OF SECURITY.
Disagree ____:____:____:____:____:____:____:____:____: Agree
- J. TO BE REALLY SUCCESSFUL IN LIFE, YOU HAVE TO CARE ABOUT MAKING MONEY.
Disagree ____:____:____:____:____:____:____:____:____: Agree

- A. TO ME, IT'S IMPORTANT IN AN OCCUPATION FOR A PERSON TO BE ABLE TO CARRY OUT HIS OWN IDEAS WITHOUT INTERFERENCE.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- B. FOR A YOUNG PERSON OF ABILITY, HIS BEST CHANCE OF BEING REALLY SUCCESSFUL LIES IN WORKING FOR A LIBRARY.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- C. SOMETIMES IT MAY BE RIGHT FOR A PERSON TO LOSE FRIENDS IN ORDER TO GET AHEAD IN HIS WORK.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- D. WORK SHOULD BE THE MOST IMPORTANT PART OF A PERSON'S LIFE.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- E. SUCCESS IN AN OCCUPATION IS MAINLY A MATTER OF LUCK.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- F. ONCE A PERSON HAS SHOWN WHAT HE CAN DO BY WORKING A NUMBER OF YEARS, HE OUGHT NOT TO HAVE TO TAKE A SPECIAL DEGREE TO GET A JOB.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- G. I LIKE THE KIND OF WORK YOU CAN FORGET ABOUT AFTER THE WORK DAY IS OVER.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- H. IT IS SATISFYING TO DIRECT THE WORK OF OTHERS.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- I. A YOUNG PERSON OF ABILITY WHO STARTS WORK IN A LARGE PRIVATE BUSINESS CORPORATION HAS A GOOD CHANCE AT ENDING UP IN ONE OF THE TOP LEVEL JOBS.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- J. A PERSON SHOULD CONSTANTLY TRY TO SUCCEED AT WORK, EVEN IF IT INTERFERES WITH OTHER THINGS IN LIFE.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- K. TO ME, A VERY IMPORTANT PART OF WORK IS THE OPPORTUNITY TO MAKE FRIENDS.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- L. GETTING RECOGNITION FOR MY OWN WORK IS IMPORTANT TO ME.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree

A. ALL THINGS CONSIDERED, WORKING FOR A LARGE PRIVATE BUSINESS FIRM APPEALS TO ME.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

B. WORK IS A GOOD BUILDER OF CHARACTER.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

C. MOST JOBS IN LIBRARIES ARE ROUTINE AND MONOTONOUS.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

D. TO ME, IT'S IMPORTANT IN AN OCCUPATION THAT A PERSON BE ABLE TO SEE THE RESULTS OF HIS OWN WORK.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

E. SUCCESS IN AN OCCUPATION IS MAINLY A MATTER OF KNOWING THE RIGHT PEOPLE.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

F. TO ME, IT'S IMPORTANT IN AN OCCUPATION TO HAVE THE CHANCE TO GET TO THE TOP.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

G. WORK IS MOST SATISFYING WHEN THERE ARE HARD PROBLEMS TO SOLVE.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

H. TO ME, GAINING THE INCREASED RESPECT OF MY FAMILY AND FRIENDS IS ONE OF THE MOST IMPORTANT REWARDS IN GETTING AHEAD IN AN OCCUPATION.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

I. A PERSON WHO WORKS FOR A LIBRARY GENERALLY HAS A GOOD CHANCE TO GET AHEAD.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

J. WORK HELPS YOU FORGET ABOUT YOUR PERSONAL PROBLEMS.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

K. EMPLOYMENT IN A LIBRARY OFFERS A HIGH DEGREE OF SECURITY.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

L. MOST JOBS IN PRIVATE BUSINESS ARE ROUTINE AND MONOTONOUS.

Disagree ___:___:___:___:___:___:___:___:___:___: Agree

- A. EVEN IF YOU DISLIKE YOUR WORK, YOU SHOULD DO YOUR BEST.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- B. TO ME, WORK IS NOTHING MORE THAN A WAY OF MAKING A LIVING.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- C. A PERSON WHO WORKS FOR A LARGE PRIVATE BUSINESS GENERALLY HAS A GOOD CHANCE TO GET AHEAD.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- D. IT IS MORE IMPORTANT FOR A JOB TO OFFER **OPPORTUNITY** THAN **SECURITY**.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- E. TO ME, IT'S IMPORTANT TO HAVE THE KIND OF WORK THAT GIVES ME A CHANCE TO DEVELOP MY OWN SPECIAL ABILITIES.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- F. I WOULD LIKE MY FAMILY TO BE ABLE TO HAVE MOST OF THE THINGS MY FRIENDS AND NEIGHBORS HAVE.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- G. THE MAIN SATISFACTION A PERSON CAN GET OUT OF WORK IS HELPING OTHER PEOPLE.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- H. WORK IS A WAY OF BEING OF SERVICE TO GOD.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- I. FOR A YOUNG PERSON OF ABILITY, HIS BEST CHANCE OF BEING **REALLY SUCCESSFUL** LIES IN WORKING FOR A LARGE PRIVATE BUSINESS CORPORATION.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- J. IF A PERSON DOESN'T WANT TO WORK HARD, IT'S HIS OWN BUSINESS.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- K. IT WOULD BE HARD TO LIVE WITH THE FEELING THAT OTHERS ARE PASSING YOU UP IN YOUR OCCUPATION.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree
- L. FOR A YOUNG PERSON OF ABILITY, HIS BEST CHANCE OF BEING **REALLY SUCCESSFUL** LIES IN SETTING UP HIS OWN BUSINESS.
Disagree ____:____:____:____:____:____:____:____:____:____: Agree

NOTES ON DATA,
A SUPPLEMENT TO

FINAL REPORT
Project No. 07-1084
Contract No. OEC-1-7-071084-5017

IMAGE AND STATUS OF THE LIBRARY
AND INFORMATION SERVICES FIELD

by
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July 1970

Part of
A Program of Research into the Identification
of Manpower Requirements, the Educational
Preparation and the Utilization of Manpower
in the Library and Information Profession

Funded by the
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National Science Foundation
U. S. Office of Education

U. S. DEPARTMENT OF
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The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contributors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
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Introduction

The following references are to note the statistical significance of data shown in various tables in the Final Report. All table references, herein, are to tables with the corresponding numbers in the Final Report.

Part I

Employed Professionals

All of the data referred to below are from the sample of employed professionals in the library and information services field: $n = 536$. Differences in reference to any of these data were not statistically significant when broken out by SMSA sampling sites.

Reference: Table 1, page 4:

- 1) With the exception of the ratings for pharmacist and nurse, all differences between the mean values "own rating" and "perception of public's rating" given by respondents for each occupation are statistically significant at the 0.05 level, i.e. a difference that large could have occurred by chance, only five out of 100 times.
- 2) Using the analysis of X^2 , (chi squared), the following "own ratings" were statistically significant at the 0.05 level.
 - a) High rankings--physician, congressman/woman;
 - b) Low rankings--electronics technician; computer-programmer; retail store manager; museum-curator.
The value for theta was computed as the means for all rankings by all respondents of all occupations.
- 3) Since there were no known universe data with which to set the theta, or expected values for each occupation, the computational procedure just described was employed. However, had the arbitrary reference point of 100 been used as the theta, or expected value, all ratings with a score above 117 and below 84 would have been statistically significant at the 0.05 level. Using the

analysis of X^2 , all "perception of public's rating" were significant at the 0.05 level, with the exception of pharmacist and computer programmer.

- 4) The sum of X^2 values in each column give a statistical significance at the 0.05 level for the entire distribution of both "public" and "own" rankings.

Reference: Table 2, page 6:

Using the analysis of X^2 , the following rankings were statistically significant at the 0.05 level: medical-information specialist; information systems analyst; and circulation. The remainder of the cells were not significant at the 0.05 level; nor was the distribution as a whole statistically significant. This validates the point made in the text that (a) the more "modern" specialties are significantly higher-ranked, and (b) remaining specialties occupied a narrow spectrum.

Reference: Table 3, page 7:

- 1) Except for the occupation, computer program, all differences between "ideal" and "estimate of actual" were statistically significant at the 0.05 level.
- 2) Using the analysis of X^2 , each cell was statistically significant at the 0.05 level, as was the entire distribution.

Reference: Table 4, page 9:

- 1) Each of the columns labeled (1) through (7) embodied a separate instrument. Reading vertically, a difference of 0.2 or more between any two values is statistically significant at the 0.05 level.
- 2) Comparing the different instruments for each occupation (reading horizontally), a difference of 0.3 or more is statistically significant at the 0.05 level.

Reference: Table 5, page 10:

1) Differences in average values rated by respondent:

Item one minus two: difference significant at 0.05.
Item one minus three: difference not significant at 0.05.
Item three minus two: difference significant at 0.05.
Item one minus five: difference highly significant (0.01).
Item one minus six: difference significant at 0.05.
Item six minus five: difference highly significant at 0.01.

2) Average of differences between items:

Item three minus one: average difference 0.14, (not significant).
Item one minus two: average difference 0.06, (significant at 0.05).
Item one minus five: average difference 2.26 (highly significant at 0.01).
Item six minus five: average difference 1.75 (highly significant at 0.01).

Reference: Tables 7-10, inclusive:

A difference of 0.2 or more between any two items is statistically significant at the 0.05 level.

Part II

Library and Other College Students

The following references principally compare the differences in data from two separate samples: library school students, n = 300; and other college students, n = 184.

Reference: Table 11, page 21:

- 1) With the exception of congressman/woman, retail store manager, and social worker, the differences in the ratings given the occupations by library school students and other college students were statistically significantly at the 0.05 level.
- 2) Using the analysis of x^2 , the entire distribution was statistically significant at the 0.05 level for library school students. If the value for theta is computed as the mean for all rankings by all library school students for all occupations,

the following cells are statistically significant at the 0.05 level: physician, lawyer, congressman/woman, electronics technician, computer programmer; and retail store manager. However, if theta is set at the arbitrary reference point of 100, all occupations with the exceptions of electronics technician, pharmacist, computer programmer, museum curator, social worker and elementary school teacher are statistically significant at the 0.05 level.

- 3) Using the analysis of X^2 , the entire distribution of ratings given the occupations by other college students was statistically significant at the 0.05 level. If theta is set at the computed mean value, the following cells are statistically significant at the 0.05 level: physician, lawyer, congressman/woman, electronics technician, computer programmer, retail store manager, museum curator, and librarian. If theta is set at the arbitrary reference of 100, the cell values are statistically significant at the 0.05 level with the following exceptions: pharmacist, computer programmer, social worker, elementary school teacher, and nurse.

Reference: Table 12, page 23:

- 1) With the exception of the ratings given by the two groups for the occupation, corporation executive, the differences in the respondents' perceptions of how the general public rates the selected occupations were significant at the 0.05 level.
- 2) Using the analysis of X^2 , the entire distribution of ratings given by library school students is statistically significant at the 0.05 level. Using the computed value of theta, the following individual cells were statistically significant: physician, lawyer, corporation-executive, congressman/woman, engineer, retail store manager, museum curator, social worker, librarian, elementary school teacher. This shows that the break between the higher and lower ranked occupations was significant.

Using the analysis of X^2 , the entire distribution of rankings given by other college students to the occupations was statistically significant at the 0.05 level. Using the computed value of theta, the following individual cells were statistically significant at the 0.05 level: physician, lawyer, corporation-executive, congressman/woman, engineer, electronics technician,

museum curator, social worker, librarian, elementary school teacher. The pattern of breakout between the higher and lower ranked occupations is almost identical with that of the library school students, even though the ranking of cells was scored significantly differently.

Reference: Table 14, page 25:

This instrument was administered only to respondents enrolled in graduate programs in library science. The analysis of X^2 reveals, that with the exception of medical information specialist and information systems analyst on the high end, and circulation on the low end, library school students do not rank any of the other specialties significantly lower or higher than the arbitrary point given for reference librarian.

Reference: Table 15, page 26:

The differences between ideal salary and estimated actual salary given by library school respondents are significant for all occupational specialties at the 0.05 level.

Reference: Table 16, page 27:

The differences between ideal and estimated actual salary given by non-library student respondents were significant at the 0.05 level with the exception of the following occupations: information-systems analyst, company-librarian, and pharmacist.

References: Tables 17-23, pages 29-32:

- 1) Each of the tables 17-23, embodies a separate instrument. For each such instrument, a difference of 0.2 or greater between any pair of occupations rated by either group of respondents (reading vertically) is statistically significant at the 0.05 level. For any given occupational specialty, a difference of 0.3 between any pair of instruments is significant at the 0.05 level.
- 2) Comparison of Ratings Given by Library and Other College Students:
 - a) In rating the occupations by the job performance characteristic, "taking special initiative in fulfilling clients needs", library

school and non-library school students' ratings were significantly different with respect to the following occupations: school librarian, medical information specialist, company librarian, science information specialist, and information systems analyst. With all the aforementioned occupations, non-library school students ratings were lower than those given by students in library science programs.

- b) Ratings with respect to the characteristic "honesty" differed significantly between the two student groups for medical information specialist, company librarian and information systems analyst.
- c) The ratings with respect to the characteristic "drive to get ahead" differed significantly between the two respondent groups for the following specialties: medical information specialist, public librarian, company librarian, science information specialist, college or university librarian, and information systems analyst. In all such cases, the ratings given by non-library students were lower than those given by library students.
- d) The two groups of students differed significantly in their rating of the characteristic "how well respected they are" for the following occupations: medical information specialist, company librarian, science information specialist, information systems analyst, and social worker.
- e) In their ratings of occupations by the characteristic "their professional expertise", the two student groups differed significantly with respect to the following occupations: medical information specialist, company librarian, and science information specialist.
- f) In their ratings of the occupations by the characteristic "cooperative in serving their clientele", the two student groups differed significantly with respect to medical information specialist, company librarian, science information specialist, information systems analyst, and social worker.
- g) In their ratings of the occupation by the characteristic "innovativeness", the two student groups differed significantly with

respect to all occupations, with the exception of college or university librarian, computer programmer, and pharmacist. In all such cases of significant difference, the non-library students rated the library-information service type occupations lower than did the library students; at the same time, they rated the non-library occupations significantly higher than did the library school students.

References: Tables 25-28, pages 35-39:

- 1) For each group of students taken separately, a difference of 0.2 between any pair of occupational value statements would be statistically significant at the 0.05 level.
- 2) Comparing the responses given to any occupational value statement between the two student groups, a difference of 0.3 would be required for the statistical significance of the 0.05 level.